

Issuance Date: June 23, 2000
Effective Date: June 30, 2000
Expiration Date: July 1, 2005

AIR OPERATING PERMIT WAAOP-000062-1

In compliance with the provisions of The State of Washington
Clean Air Act Chapter 70.94 Revised Code of Washington

Kimberly-Clark Tissue Company
2600 Federal Ave.
Everett, Washington

is authorized to operate in accordance
with the terms and conditions
of this permit.

Issued by:

State of Washington
DEPARTMENT OF ECOLOGY
300 Desmond Drive
P. O. Box 47600
Olympia, Washington 98504-7600

Approved By:

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INTRODUCTION, LEGAL AUTHORITY, AND FACTUAL BASIS

This Air Operating Permit is authorized under the Operating Permit Regulation, Chapter 173-401 WAC. The provisions of this permit describe the emissions limitations, operating requirements, monitoring and recording requirements, and reporting frequencies for the permitted source.

The requirements listed in this permit are Federally enforceable, except those that are marked **State Only**. State Only requirements are marked in **bold print**.

Kimberly-Clark Tissue Company (KCTC) requires a Title V Air Operating Permit because it emits or has the potential to emit one hundred tons per year of one or more of air pollutants (WAC 173-401-300(1)).

During the drafting of this permit, Ecology has attempted to incorporate requirements using the exact language of the law, regulation or order. In some cases, this has not been possible. Where there is a difference in language, this difference is presented in this permit only for clarification of the underlying requirement. The legal requirement remains the underlying applicable requirement cited in the "Applicable Requirements" column of the tables and the citations contained in brackets at the end of each requirement. Any conflict between the permit and an underlying requirement will be resolved by referring to the cited applicable requirement. For permit conditions with multiple applicable requirements, the most restrictive has been cited as the underlying requirement. The basis and listing of this selection is described in the UNDERLYING APPLICABLE REQUIREMENTS Section of this permit. Note that although one set of monitoring and reporting requirements will address several applicable requirements, the source remains subject to all cited applicable requirements. Unless otherwise stated, the effective date of referenced regulations or statutes is that of the provision in effect on the date of permit issuance.

The Title V Air Operating Permit consists of all parts of this assembled document including all Appendices, but does not include the accompanying Support Document.

The definition of terms contained in WAC 173-401-200, and as defined in all referenced regulations, apply to this permit unless otherwise defined in the permit.

Any federal test method referenced within this permit, unless specifically stated otherwise within the body of the permit, is that which is contained in 40 CFR 60 Appendix A (July 1, 1992). Any state test method referenced within this permit, unless specifically stated otherwise within the body of the permit, is that which is contained in the "Ecology Source Test Manual" as of July 12, 1990. All test methods are the reference method, unless otherwise identified (40 CFR Part 60 Appendix A, July 1, 1992). All state orders are issued by the authority of WAC 173-400-110

EMISSION UNIT SPECIFIC REQUIREMENTS [WAC 173-401-600]

The emission units covered by conditions A through E are subject to the following emission limits. These units are also subject to the facility-wide applicable requirements and the associated monitoring, recordkeeping, and reporting requirements for these limits are in the Facility-Wide section of this permit. Unless specified otherwise, the basis of authority for the type and frequency of monitoring imposed in conditions A through E is WAC 173-401-615.

Refer to Appendix D for emission estimate algorithms. These algorithms set forth the manner by which emissions are calculated for those requirements for which the Reference Method itself does not directly result in an emission estimate. The Permittee may use an equivalent alternative method with written approval from Ecology.

A. No. 14 Cogeneration Boiler

40 CFR Part 60 Subpart A, D and Db (except Sulfur dioxide requirements under Db), 40 CFR 60.8 (Performance tests), and 40 CFR 60.46 (Test methods and procedures) are applicable. The reference test methods and the specific requirements are listed below in Table A.

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
A.1	NO _x	180 lbs/hr and 150 ppmv @ 7% O ₂ for a 30 day rolling average	Monitor continuously using a CEM conforming with July 1, 1992, EPA Title 40 CFR Part 60, Appendix B and Appendix F Performance Specifications. Report 30 day rolling average ppm, maximum daily ppm, average daily lbs/hr, monthly average lbs/hour, tons/month, and any exceedance monthly. Method 7E is the reference test method.	Order DE 98-AQI028, Condition 16, 17, and 21 40 CFR 60.45 40 CFR 60.49b 40 CFR 60.13 40 CFR 60.46b 40 CFR 60.48b
		0.30 lb/million BTU derived from liquid fossil fuel, or liquid fossil fuel and wood residue, or gaseous fossil fuel and wood residue (184.8 lbs/hr) ⁱ		40 CFR 60.44 40 CFR 60.44b(d)
A.2	CO.	359 lbs/hr and 511 ppmv @ 7% O ₂ for a 365 day rolling avg. , and shall not exceed 763 ppmv @ 7% O ₂ on a 30 day rolling avg.	Monitor continuously using a CEM conforming with EPA Title 40 CFR (July 1, 1992) Part 60, Appendix B and Appendix F Performance Specifications. Report the daily average ppm, monthly average ppm, daily maximum ppm, daily average lbs/hr., and monthly average lbs/hr. Any exceedance is reported monthly. Method 10 is the reference test method.	Order DE 98-AQI028, Condition 2, 16, and 17 40 CFR 60.13
A.3	SO ₂	79.2 lbs/hr for a 12 month rolling avg	Monitor continuously using a CEM conforming with EPA Title 40 CFR (July 1, 1992) Part 60, Appendix B and Appendix F Performance Specification. Report 12 month rolling avg and any exceedance monthly. Method 6 and 6C are the reference test methods.	Order DE 98-AQI028, Condition 26 40 CFR 60.45 40 CFR 60.49b 40 CFT 60.13 40 CFR 60.45b(j) 40 CFR 60.47b(f)
		0.80 lb/million BTU derived from liquid fossil fuel or liquid fossil fuel and wood residue (492.8 lbs/hr) ⁱ		40 CFR 60.43
		0.05 % sulfur, fuel oil	Maintain Fuel receipts	Order DE 98-AQI028
A.4	VOC	34.5 lbs/hr	Monitor and report yearly EPA Method 18 or 25A test results	Order DE 98-AQI028, Condition 8

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
A.5	Particulate	0.011 gr/dscf @ 7% O ₂ and 17.4 lbs/hr.	Test and report annually EPA Method 5 (Reference test method) test results. Testing has been reduced to annually by Ecology's written approval, with 1-year continuous compliance established. Testing frequency shall return to quarterly if limit exceeded.	Order DE 98-AQI028, Condition 5, amended to annually by Ecology letter dated November 11, 1999. 40 CFR 60.49b
		0.1 gr/dscf @ 7% O ₂		WAC 173-410-40(2)(c)(iii)
		0.10 lb/million BTU derived from fossil fuel or fossil fuel and wood residue (61.6 lbs/hr) ⁱ	Evaluate condition of baghouse modules weekly. Note functionality of bags and any bag failures. Repair bags when detected and report bag failures within 72 hours.	40 CFR 60.42 40 CFR 60.43b
A.6	PM ₁₀	0.0084 gr/dscf @ 7% O ₂ and 11.6 lbs/hour	Monitor and report annually EPA Method 201 or 201A (40 CFR Part 51, Appendix M), or Method 5 (assuming all PM is PM ₁₀). Method 5 is the reference test method. Testing has been reduced to annually by Ecology's written approval, with 1-year continuous compliance established. Testing frequency shall return to quarterly if limit exceeded. Evaluate condition of baghouse modules weekly. Note functionality of bags and any bag failures. Repair bags when detected and report bag failures within 72 hours.	Order DE 98-AQI028, Condition 6, amended to annually by Ecology letter dated November 11, 1999.
A.7	Opacity	10% 6 consecutive minute average	Monitor continuously using a CEM conforming with EPA Title 40 CFR (July 1, 1992) Part 60, Appendix B and Appendix F Performance Specification. Report daily avg/max and any exceedance monthly.	Order DE 98-AQI028, Condition 16, 23, 27 40 CFR 60.45 40 CFR 60.49b 40 CFR 60.11(c) 40 CFR 60.13
		20%, except for one 6-minute period per hour not greater than 27% opacity	Conduct EPA Method 9 (which is the reference test method), weekly, weather permitting as noted in November 18, 1999 Ecology letter (EPA Method 22 w/ 15 min. observation period may be used when certified Method 9 reader unavailable). Testing has been reduced by Ecology's written approval, with 1-year continuous compliance established. Testing frequency shall return to 5 days/wk if limit exceeded. Report all readings monthly.	40 CFR 60.42(a)(2) 40 CFR 60.43b(f) 40 CFR 60.11(b) 40 CFR 60.46 (b)(3)
A.8	Notification and record keeping		Records must be maintained.	40 CFR 60.7
A.9	Maintain and operate boiler with good air pollution control practice.		Follow applicable standards and maintenance requirements.	40 CFR 60.11(d)

A.10	Credible Evidence			40 CFR 60.11(g)
A.11	Circumvention		The permittee shall not build something to conceal an emission or otherwise constitute a violation of an applicable standard.	40 CFR 60.12
A.12	Monitoring Requirements		Appendix F is applicable for all CEMs used for compliance with emission limits on a continuous basis.	40 CFR 60.13
A.13	Modification		Ecology is notified of modification plans.	40 CFR 60.14
A.14	Reconstruction		Ecology is notified of reconstruction plans.	40 CFR 60.15

ⁱ For comparison purposes, this value was calculated based on oil firing assuming a heat-input rate of 616 million BTU/hr.

B. No. 10 Recovery Boiler

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
B.1	NOx	See C.1 below	Monitor continuously using a CEM conforming with EPA Title 40 CFR (July 1, 1992) Part 60, App. B Perf. Spec. Report daily avg lbs/hr. Annually conduct a performance evaluation in accordance with Performance Specification 2 in Appendix B (40 CFR Part 60 July 1, 1992)	Order DE 98-AQI028, Condition 22
B.2	SO ₂	300 ppm for an hourly avg 20 lb/ADUT	Monitor continuously using a CEM conforming with EPA Title 40 CFR (July 1, 1992) Part 60, App. B Perf. Spec. Report daily avg ppm and any exceedance monthly. Annually conduct a performance evaluation in accordance with Performance Specification 2 in Appendix B (40 CFR Part 60 July 1, 1992) Method 6c is the reference test method.	Order DE 78-106, table page 3 WAC 173-410-40(1)(a)(e)
B.3	Particulate	2.5 lb/ADUT 0.06 gr/dscf @ 8% O ₂	Conduct Monthly DOE Method 5 (Reference test method), one run. Report gr/dscf @ 8% O ₂ and any exceedance monthly.	Order DE 78-106, table page 3 WAC 173-410-40(2)(b)
B.4	Opacity	35% for 6 consecutive minutes	Monitor continuously using a CEM conforming with EPA Title 40 CFR (July 1, 1992) Part 60, App. B Perf. Spec. Report daily avg and any exceedance monthly. Conduct a performance evaluation of Performance Specification 1 in Appendix B (40 CFR Part 60 July 1, 1992) Method 9 is the reference test method.	Order DE 78-106, table page 3

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
		35% for 6 consecutive minutes	Conduct EPA Method 9, weekly, weather permitting as amended by Ecology letter dated November 18, 1999 (EPA 40 CFR Pt. 60, App. A Method 22 w/ 15 min. observation period may be used when certified Method 9 reader unavailable). Testing has been reduced by Ecology's written approval, with 1-year continuous compliance established. Testing frequency shall return to 5 days/wk if limit exceeded. Report all readings monthly. EPA method 9 is the reference test method.	Order DE 98-AQI028, Condition 24, 27 WAC 173-410-40(3)
B.5	Ammonia	10 ppm @ 7% O ₂	Test and Report annually EPA Method 5 w/ impinger modifications or an equivalent method approved by Ecology.	Order DE 98-AQI028, Condition 25 amended to annually by Ecology letter dated 2/4/99.
B.6	NH ₃ injection Feed Rate	none	Report daily maximum, average, and duration of the feed rate readings monthly.	Order DE 98-AQI028, Condition 25
B.7	Operational capacity	7,928,000 gal/month of SSL burned.	Operational records. Report SSL gal/month and any exceedance monthly.	Order DE 98-AQI028, Condition 14

C. #14 and #10 Boilers combined

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
C.1	NO _x	1400 tons rolling yearly total of both boilers	Monitor continuously using a CEM conforming with EPA Title 40 CFR (July 1, 1992) Part 60, App. B Perf. Spec. Report yearly rolling total tons and any exceedance monthly. Annually conduct a performance evaluation in accordance with Performance Specification 2 in Appendix B (40 CFR part 60 July 1, 1992)	Order DE 98-AQI028, Condition 22

D. Power Boilers Nos. 7, 8, 9 in aggregate

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
D.1	Natural gas use	413,300,000 ft ³ /month max, 80,000,000 ft ³ /month (12 month rolling avg.)	Operational records. Report ft ³ /month used and any exceedance monthly.	Order DE 98-AQI028, Condition 13
D.2	fuel oil use	469,000 gal/month (max), 39,100 gal/month (12 month rolling avg.)	Operational records. Report gallons/month used and any exceedance monthly.	Order DE 98-AQI028, Condition 13

E. Catalytic Oxidizer (EM5)

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
E.1	Particulate	50 lb/day	Track gas usage monthly and calculate particulate from EPA emission factor AP42 1.4. Report particulate emission annually.	NOC Approval Order DE 79-335, paragraph 6
E.2	Hydrocarbon	100 lb/day	Annual source test (Applicable EPA method for non-methane hydrocarbons or equivalent approved by Ecology). Document and report date when catalyst regenerated on monthly report. Report hydrocarbon emission annually.	NOC Approval Order DE 79-335, paragraph 6

FACILITY-WIDE GENERAL REQUIREMENTS [WAC 173-401-600]

These generally applicable requirements apply facility-wide, including insignificant emission units or activities. Insignificant emission units (IEUs) or activities, however, are not subject to monitoring, testing, recordkeeping, reporting, or compliance certification requirements.

1. The permittee cannot vary the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant, except as directed according to air pollution episode regulations. [WAC 173-400-205]
2. The permittee shall not cause or permit emission of any contaminant if it is detrimental to the health, safety, or welfare of any person, or causes damage to property or business. [WAC 173-400-040(5)]
3. The permittee shall not install or use any means that conceal or mask an emission of an air contaminant that would otherwise violate provisions in this permit. [WAC 173-400-040(7)]
4. The permittee shall take reasonable precautions to prevent the release of air contaminants from emission units engaged in material handling, construction, demolition, or any other operation that is a source of fugitive emissions. Reasonable precautions include but are not limited to application of water to paved areas and debris piles as necessary to control fugitive dust or the timely removal or coverage of material piles. [WAC 173-400-040(3)(a)]

5. The permittee shall take reasonable precautions to prevent fugitive dust from becoming airborne and maintain and operate the source to minimize emissions. Reasonable precautions include but are not limited to application of water to paved areas and debris piles as necessary to control fugitive dust or the timely removal or coverage of material piles. [WAC 173-400-040(8)(a)]
6. The following condition is **state-only** and is not federally enforceable under the Clean Air Act: No deposit of particulate matter beyond property line so as to interfere unreasonably with use and enjoyment. [WAC 173-400-040(2)]
7. The following condition is **state-only** and is not federally enforceable under the Clean Air Act: Any person causing odor which may unreasonably interfere with use & enjoyment of property must use recognized good practice and procedures to reduce odors to a reasonable minimum. [WAC 173-400-040(4)]
8. Except where specific requirements are defined elsewhere, the Permittee will maintain records of actions taken by the permittee in response to complaints received by the permittee or of possible noncompliance noticed by the facility staff in day to day operations for facility-wide general requirements number 2,4,5,6, and 7 by record-keeping. The permittee shall assess the validity of each complaint and commence corrective action, if warranted, as soon as possible but no later than 3 working days of receiving the complaint. The permittee shall keep records of the following: complaints received; the assessment of validity; and what, if any, corrective action is taken in response to the complaint. The permittee shall maintain a log of monthly walk through inspections for fugitive emissions. [WAC 173-401-630]
9. The permittee shall not cause or permit the emission for more than three minutes, in any one hour, of an air contaminant from any emission unit which at the emission point, or within a reasonable distance of the emission point, exceeds twenty percent opacity except as provided in WAC 173-400-040(1). [WAC 173-400-040(1)]
10. Emissions from any emissions unit, other than a recovery system, a blow system, or an acid plant shall not exceed 1,000 parts per million sulfur dioxide, corrected to 7% oxygen in the case of a combustion unit, for an hourly average. [WAC 173-410-040(1)(f)]
11. Where this permit specifically requires continuous monitoring, the source shall, consistent with Ecology's Source Test Manual, calibrate, maintain and operate equipment for continuously monitoring and recording the emissions specified. The source may be temporarily exempted from monitoring and reporting requirements during periods of monitoring system malfunctions, provided that the source shows to Ecology's satisfaction that the malfunction was unavoidable and is being repaired as expeditiously as practicable. [WAC 173-400-105(5)(h)].

The permittee shall make every reasonable effort to acquire, maintain, and recover valid monitoring data. Except where an applicable requirement contains more stringent provisions, permittee shall recover valid monitoring data and recordkeeping for at least 90% of the averaging periods during each month or, if no averaging period is used, collected during each month, in which this permit requires monitoring of a process or parameter. The 10% allowance is contingent on the permittee providing an acceptable explanation for the loss of monitoring data. [WAC 173-401-615]
12. The Permittee shall at all times, including periods of abnormal operation and upset conditions, to the extent practicable, maintain and operate any affected facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to Ecology which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [WAC 173-410-040(4)]

13. Chemical Accidental Release Program – This stationary source, as defined in 40 CFR section 68.3, is subject to part 68, the accidental release prevention regulations. This stationary source shall submit a risk management plan (RMP) by the date specified in 40 CFR section 68.10. This stationary source shall certify compliance with the requirements of part 68 as part of the annual compliance certification as required by 40 CFR part 70. [40 CFR Part 68.3]
14. Ozone Protection - The permittee shall comply with the applicable standards for recycling and emissions reductions pursuant to 40 CFR Part 82, Subpart F. [40 CFR Part 82, Subpart F]
 - a. Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to § 82.156.
 - b. Equipment used during the maintenance, service, repair or disposal must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
 - c. Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" is defined at § 82.152.)
 - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant purchased and added to such appliances must do so in compliance with §82.166.
15. The permittee shall not cause or permit the emission of particulate material from any general process operation in excess of 0.1 grains/dscf of exhaust gas.[WAC 173-400-060] Emission of particulate from emission units, other than acid plants or recovery systems shall not exceed 0.1 grains/dscf (corrected to 7% oxygen in the case of combustion units), for units not classified under WAC 173-410-040(2)(c)(i) or (ii). [WAC 173-410-040(2)(c)(iii)]
16. Operation and maintenance (O&M) manuals for all equipment that has the potential to affect emissions be developed and followed. Emissions which result from failure to follow O&M will be considered proof that the equipment has not been properly operated and maintained. [WAC 173-410-040(4)]
17. As affects IEUs, the permittee shall comply with WAC 173-400-050(1)&(3), and WAC 173-400-060. [WAC 173-401-530(2)(b)]
18. The Permittee will continue to comply with applicable requirements with which the Permittee is in compliance. [WAC 173-401-630(3) and 510(2)(h)(iii)(A)]

The Permittee will meet applicable requirements that become effective during the permit term on a timely basis. [WAC 173-401-630(3) and 510(2)(h)(iii)(B)]
19. National Emission Standards for Hazardous Pollutants from the Pulp and Paper Industry.
 - a) Permittee shall comply with applicable requirements of the National Emission Standards for Hazardous Pollutants from the Pulp and Paper Industry (40 CFR 63.440-458) within three years of the effective date of the rule. [40 CFR 63.440(d)]
 - b) Permittee shall submit the initial, notification report specified under 40 CFR 63.9(b)(2) within 1 year after the effective date of the rule (rule became effective April 15, 1998). [40 CFR 63.455(a)]
20. The following condition is **state-only** and is not federally enforceable under the Clean Air Act. The permittee cannot burn used oil not meeting standards prescribed in RCW 70.94.610(1). [RCW 70.94.610]
21. The permittee must comply with 40 CFR sections 61.145 and 61.150 and WAC 173-400-075 if asbestos-containing material is present above specified quantities in a facility being demolished or renovated. [40 CFR Part 61, Subpart M]

MONITORING, RECORDKEEPING & REPORTING

Monitoring Requirements [WAC 173-401-630(5)(b).]

22. Unit-Specific Requirements. The permittee shall conduct routine monitoring of emissions in accordance with the program of monitoring or testing required for specific emission units in conditions A through F of this permit. [WAC 173-410-062].
23. Unavoidable Excess Emissions. This condition applies, where applicable, to excess emissions that are claimed to be unavoidable pursuant to WAC 173-400-107. The permittee may include in its reports demonstrations that excess emissions were unavoidable, consistent with the requirements of WAC 173-400-107. The permittee shall have the burden to prove that deviations from permit terms were unavoidable. Excess emissions that are unavoidable are excused and are not subject to penalty. [WAC 173-400-107]
24. Violation Duration. A violation of an emission limit is presumed to commence at the time of the testing, record-keeping, or monitoring indicating noncompliance, and to continue until the time of retesting, record-keeping, or monitoring that indicates compliance. This presumption may be defeated if credible evidence shows that the violation was of longer duration, that there were intervening days during which no violation occurred, or that the violation was not continuing in nature. [42 U.S.C. 7413(e)(2)]. The permittee may conduct monitoring or testing more frequently than required by this permit.
25. reserved for future use

Recordkeeping Requirements

26. The permittee shall keep records of any periodic and continuous monitoring required by this permit. These records shall include the following, where applicable:
 - a. The date, place as defined in requirement, and time of sampling or measurement;
 - b. The date(s) analysis were performed;
 - c. The company or entity that performed the analysis;
 - d. The analytical techniques or methods used;
 - e. The results of such analysis;
 - f. The operating conditions existing at the time of sampling or measurement. [WAC 173-401-615(2)(a); WAC 173-400-105]
27. The permittee shall keep records describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes. [WAC 173-401-724(5)]
28. The permittee shall retain records of all required monitoring data and support information for a period of 5 years from the date of monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [WAC 173-401-615(2)(c)]
29. The permittee shall maintain a contemporaneous record of any deviation from the requirements of this permit. [WAC 173-401-615(3)(b)]

Reporting Requirements [WAC 173-401-520, -615(3), & -710]

30. In addition to any emission unit specific reporting requirements identified below, emission unit specific reporting requirements are identified in conditions A through E.
31. Report within 15 days of the end of each month results of monitoring and average daily production of air-dried unbleached pulp. [WAC 173-410-062(1),(3),(4),(5)]

32. Monitoring reports required by this permit must be submitted to Ecology within 15 days of the end of each calendar month. [WAC 173-410-062]. The reports must clearly identify all instances of deviations from permit requirements. [WAC 173-401-615(3)(a)]
33. Submit an inventory of emissions from the source each year no later than 105 days after the end of the calendar year; maintain records of information necessary to substantiate any reported emissions. [WAC 173-400-105(1)]
34. The permittee shall promptly submit a report of any deviations from permit conditions. [WAC 173-401-615(3)(b)]
- a. For purposes of this permit, submitting a report "promptly" means the following: (a) if the deviation presents a potential threat to human health or safety, the report shall be made as soon as possible but no later than 12 hours after the discovery of the deviation; (b) for other deviations, "promptly" means that the deviations are identified in the respective monthly report.
- b. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken. [WAC 173-401-615(3)] The permittee may include in its reports demonstrations that excess emissions were unavoidable, consistent with the requirements of WAC 173-400-107.
35. Certification of truth, accuracy and completeness. Any application form, report or compliance certification required to be submitted by this permit or by Chapter 401 WAC shall contain certification by a responsible official of truth, accuracy and completeness. Where the permit requires reporting more frequently than once every 3 months the responsible official's certification need only be submitted once every 3 months covering all required reporting since the date of the last certification. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. [WAC 173-401-520]
36. All reports and renewal applications required by this permit shall be submitted to:
- Department of Ecology
Industrial Section
P. O. Box 47706
Olympia, WA 98504-7706
37. Compliance Certification. The permittee shall submit a report to the Department of Ecology and to EPA Region X 12 months after the effective date of this permit and every year thereafter, within 45 days after the close of the year that the certification covers, certifying compliance with the terms and conditions contained in this permit. The certification shall describe the following:
- a. the permit term or condition that is the basis of the certification;
- b. the compliance status;
- c. whether compliance was continuous or intermittent; and
- d. the methods used for determining compliance. [WAC 173-401-630(5)]

The permittee is not required to certify compliance for insignificant emission units or activities. [WAC 173-401-530(2)(d)]

STANDARD TERMS & CONDITIONS

38. Duty to Comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of chapter 70.94 RCW and, for federally enforceable provisions, a violation of the FCAA. Such violations are grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [WAC 173-401-620(2)(a)]

39. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [WAC 173-401-620(2)(b)]
40. Permit Actions. This permit may be modified, revoked, reopened, and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [WAC 173-401-620(2)(c)]
41. Property Rights. This permit does not convey any property rights of any sort, or any exclusive privilege. [WAC 173-401-620(2)(d)]
42. Duty to Provide Information. The permittee shall furnish to the permitting authority, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the permitting authority copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA administrator along with a claim of confidentiality. Permitting authorities shall maintain confidentiality of such information in accordance with RCW 70.94.205. [WAC 173-401-620(2)(e)]
43. Permit Fees. The permittee shall pay fees as a condition of this permit in accordance with the permitting authority's fee schedule. Failure to pay fees in a timely fashion shall subject the permittee to civil and criminal penalties as prescribed in chapter 70.94 RCW. [WAC 173-401-620(2)(f)]
44. Emissions Trading. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit. [WAC 173-401-620(2)(g)]
45. Severability. If any provision of this permit is held to be invalid, all unaffected provisions of the permit shall remain in effect and be enforceable. [WAC 173-401-620(2)(h)]
46. Permit Appeals. This permit or any conditions in it may be appealed only by filing an appeal with the pollution control hearings board and serving it on the permitting authority within thirty days of receipt pursuant to RCW 43.21B.310. This provision for appeal in this section is separate from and additional to any federal rights to petition and review under § 505(b) of the FCAA. [WAC 173-401-620(2)(i)]
47. Permit Continuation. This permit is issued for a 5 year term; however, this permit and all terms and conditions contained therein, including any permit shield provided under WAC 173-401-640, shall not expire until the renewal permit has been issued or denied if a timely and complete application has been submitted. An application shield granted pursuant to WAC 173-401-705(2) shall remain in effect until the renewal permit has been issued or denied if a timely and complete application has been submitted. [WAC 173-401-620(2)(j)]
48. Inspection and Entry. Upon consent of the permittee or upon presentation of credentials and other documents as may be required by law, the Department of Ecology or an authorized representative shall be allowed to:
- (1) Enter the source;
 - (2) Have access to and copy at reasonable times any records that must be kept under this permit;
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - (4) As authorized by WAC 173-400-105 and the FCAA, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements.
- [WAC 173-400-105(4); WAC 173-401-630(2)]

PERMIT SHIELD

Compliance with the conditions in this permit is deemed to constitute compliance with applicable requirements as contained in this permit on which the term or condition is based, as of the date the permit is issued. [WAC 173-401-640(1)]

The Department of Ecology has determined that the requirements listed in Appendix A to this permit do not apply to the facility, as of the date the permit is issued, for the reasons specified. [WAC 173-401-640(2)]

Appendix A

Permit Shield/Inapplicable Requirements

The following requirements do not apply to the facility as of the date of the permit issuance for the reasons indicated:

CITE	BRIEF DESCRIPTION	REASON
40 CFR §60.43(a)(2) subpart D	1.2 lb SO ₂ /million Btu derived from solid fossil fuel or solid fossil fuel and wood residue	K-C does not burn any solid fossil fuel.
40 CFR §60.43(b) subpart D	utilize formula to determine SO ₂ standard when different fossil fuels are burned simultaneously	K-C boilers do not burn combinations of fossil fuels. Emission limits set in permit approval do not have different values for different fuels.
40 CFR §60.44(a)(1) subpart D	0.20 lb NO _x /million Btu derived from gaseous fossil fuel	The cogeneration boiler is the only source large enough to be considered in this NSPS category. Natural gas will serve only as a startup and auxiliary fuel.
40 CFR §60.44(a)(3) subpart D	0.70 lb NO _x /million Btu derived from solid fossil fuel or solid fossil fuel and wood residue (except lignite or solid fuel w/ 25% coal refuse)	K-C does not burn any solid fossil fuel.
40 CFR §60.44(a)(4) & (5) subpart D	0.60 lb NO _x /million Btu derived from lignite or lignite and wood residue; but 0.80 lb/million for lignite from ND, SD, or MT and burned in a cyclone-fired unit	K-C does not burn any lignite fuel.
40 CFR §60.44(b) subpart D	utilize formula to determine NO _x standard when different fossil fuels are burned simultaneously	K-C boilers do not burn combinations of fossil fuels.
40 CFR Part 60 Subpart Dc	applies to steam generating units for which construction, modification or reconstruction commenced after June 9, 1989, and that has a maximum design heat input capacity of < 100 million Btu/hour, but > 10 million Btu/hour	Sources subject to 40 CFR 60 Subpart D are not subject to this subpart. Thus, the Cogeneration No. 14 boiler is not covered here since Subpart D applies to it. Also, K-C does not have any other boilers which fit this capacity criteria.
40CFR Part 60 Subpart Db All sections of Section 60.42b except Section 60.42b(j) All sections of Section 60.44b except 60.44b(d) All sections of Section 60.45b except for 60.45b(j) All sections of 60.47b except for 60.47b(f)	Applies to steam generating units for which construction, modification or reconstruction commenced after June 19, 1984, and that has a heat input capacity from fuels combusted in the unit of > 100 million Btu/hour.	In the preamble to the proposed rule, it stated that “steam generating units firing very low sulfur fuel oil are exempt from the SO ₂ percent reduction requirement limiting SO ₂ emissions from industrial-commercial-institutional steam generating units.” 54 Federal Register 28448 July 6, 1989. No. 14 boiler does not combust coal, and does not combust mixtures of oil, gas, and waste wood simultaneously. Facilities combusting low sulfur oil are not subject to the requirements of these sections.

CITE	BRIEF DESCRIPTION	REASON
40 CFR Part 60 Subpart BB	applies to facilities in kraft pulp mills	K-C in Everett is a sulfite based pulp and paper mill. This NSPS covers kraft processes only and no part of it is applicable to a sulfite mill.
40 CFR Part 61 Subpart E	Stationary sources which process mercury ore to recover mercury, use mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide, and incinerate or dry wastewater treatment plant sludge.	K-C does not operate any applicable equipment. K-C incinerates sludge from its primary and secondary wastewater treatment plants with its woodwaste. However, this boiler is defined statutorily as a woodwaste boiler, not a sludge incinerator. Sludge is an incidental and minor fuel. The mercury emission standards (40 CFR 61.52) specifically apply to mercury ore processing facilities, mercury cell chlor-alkali plants, sludge incineration plants, and sludge drying plants, not to woodwaste boilers. In chemical analyses, mercury has not been detected in K-C's sludge in any case. A nondetectable level of mercury in the sludge would show potential emissions well below 3,200 grams/day and well below the 1,600 grams/day repeat testing threshold defined in the rule.
40 CFR Part 82	Any person who may sell or distribute, or offer to sell or distribute, in interstate commerce any of the listed nonessential Class I or Class II chlorofluorocarbons. 40 CFR §82.64.	This is not a part of K-C's business and the mill does not have any refrigeration units which meet the threshold criteria described in Subpart F.
WAC 173-400-040(3)(b)	Materials handling, construction, demolition, etc. at emissions unit identified as a significant contributor to nonattainment. Use reasonable and available control methods to control emissions of contaminants for which area is designated nonattainment.	K-C has never been identified as a significant contributor to any nonattainment area.
WAC 173-400-040(6)	Any person, except where can demonstrate no feasible method of meeting the limit. SO ₂ 1,000 ppm (corrected to 70% O ₂), average of 60 consecutive minutes.	Standards identified in WAC 173-410 supersede this requirement. See source-specific sections of application for SO ₂ limits.
WAC 173-400-040(8)(b)	Fugitive dust sources identified as significant contributors to PM-10 nonattainment. Reasonably available control technology to control emissions.	K-C is not in a nonattainment area and has not been identified as a significant contributor to a PM-10 nonattainment problem.

CITE	BRIEF DESCRIPTION	REASON
WAC 173-400-101 Registration	Power boilers; Kraft pulp mills; any major source. Register source with Ecology or local authority; With approval of WA operating permit program, these req's don't apply to operating permit sources.	Operating permit program of WAC 173-401 will supersede the annual registration (WEDS) program currently followed. Additional regulations covering the registration program (WAC 173-400-102, -103, & 104) are not applicable either.
WAC 173-400-105(5)(a)	Continuous monitoring & recording req'd for opacity and SO ₂ of fossil fuel fired steam generators, except where capacity < 250 million BTU/hr heat input.	The capacity of applicable K-C boilers fit the exception.
WAC 173-400-105(6)	Sources not subject to operating permit program. Submit sufficient info to determine impact on ambient concentrations of SO ₂ of changes in raw materials or fuels increasing emissions of SO ₂ ≥ 40 tpy.	Only applies to sources not subject to operating permit program.
WAC 173-400-151	Sources to which significant visibility impairment of a Class 1 area is reasonably attributable. Apply best available retrofit technology (BART) for contaminant contributing to impairment that is emitted at > 250 tpy.	K-C has not been identified as a source impacting a Class I area.
Chapter 173-405 WAC	Kraft mills, which are defined as any manufacturing facility which uses an alkaline solution containing sodium hydroxide and/or sodium sulfide.	This rule is for Kraft pulping only, and does not apply to the K-C, Everett sulfite pulp mill.
WAC 173-410-040(1)(b)	Sulfite pulping mill that does not incinerate spent sulfur liquor restricted to 4 lbs SO ₂ /ton of air dried, unbleached pulp (daily avg.).	K-C burns its spent liquor in Recovery Boiler No. 10
WAC 173-410-040(1)(c)	Blow system restricted to 0.2 lb SO ₂ /ton of air dried, unbleached pulp discharged from digester (15 min. avg.)	Digester system and washer emissions are integrated into the spent liquor burning and acid recovery plant. No digester blow emissions are released directly to atmosphere. Emissions are collected for recovery.
WAC 173-410-040(2)(a)	Recovery systems constructed before 1/24/72 restricted to 0.10 grains/dscf.	Applicability date is not consistent with the facility's recovery system.
WAC 173-410-040(2)(c)(ii)	Units which combust fuel other than wood & wood residue to produce steam & which began construction after 1/1/83.	Power boilers 7, 8, and 9 are grandfathered as their installation dates precede the applicability criteria
Chapter 173-433 WAC	Any device that burns wood, coal, or any other non gaseous or non liquid fuels. WAC 173-433-020 & -030(9).	This regulation applies to wood stoves and fireplaces. K-C does not operate such devices.
WAC 173-435-050(2)	no open fires during an air pollution episode	No open burning is done at the K-C Everett mill site.
RCW 70.94.610	Cannot burn used oil not meeting standards prescribed in RCW 70.94.610(1).	K-C utilizes a contractor to ship used oil off-site for reclamation.

Appendix B. Existing Applicable Orders

Order DE 78-106

Order DE 79-335 - NOC approval

Order DE 98-AQI028 - NOC approval

Appendix C

Definitions of Abbreviations Used in Permit

ADMT	air dry metric ton
adut	air dried unbleached ton
avg	average
BACT	Best available control technology
BART	Best available reasonable technology
BDMT	bone dry metric ton
BL	black liquor
BLS	black liquor solids
Btu	British thermal unit, is the amount of heat necessary to increase the temperature of one pound of water at 39.1°F one Fahrenheit degree
CEM	continuous emission monitor
CO	carbon monoxide
DOE	Department of Ecology
dscf	dry standard cubic foot
EPA	Environmental Protection Agency
ESP	electrostatic precipitator
FCAA	Federal Clean Air Act
gpm	gallons per minute
gr	grain
HAP	hazardous air pollutant
IEU	insignificant emission unit
kg	kilogram
lbs	pounds
MACT	maximum available control technology
MMBTU	million British thermal units
NOx	oxides of nitrogen
NSPS	new source performance standards
PM	particulate matter
PM-10	particulate matter less than 10 microns in diameter
ppm	parts per million
ppmdv	part per million dry volume
RACT	Reasonable available control technology
SERP	source emission reduction plan
SIP	state implementation plan
SO ₂	sulfur dioxide
SSL	spent sulfite liquor
tpy	tons per year
TRS	total reduced sulfur
TSP	total suspended particulate
U.S.C.	United States Code
VOC	volatile organic compound
WAC	Washington Administrative Code

Appendix D

Algorithms for Emissions Calculation

The Permittee may use an equivalent alternative method with written approval by Ecology

Permit Condition A.1

$$\text{NOx (mass per time)} = \text{Concentration} * \text{Air Flow Rate} * \text{Unit Conversion Factor} * \text{Time Adjustment}$$

Concentration is case specific in terms of averaging period. Each emission unit limitation specifies the averaging period used by the CEM. For example, the CEM on #14 Boiler derives a value averaged over 1 hour to determine compliance.

Air Flow Rate must be representative of normal operation. Air flow derived from correlation between firing rate and Method 2 determined air flow resulting from source testing.

Unit Conversion Factor is pollutant specific and involves molar mass and molar volume.

Time Adjustment is case specific and is dependent on the flow rate time unit. For example, a daily pounds per hour NOx rate is calculated using CEM data from the 24 hour day and measured flow rates. That average is placed into the previous 29 days of data to derive the current 30 day average as required by the permit.

Permit Condition A.2

$$\text{CO (mass per time)} = \text{Concentration} * \text{Air Flow Rate} * \text{Unit Conversion Factor} * \text{Time Adjustment}$$

Concentration is case specific in terms of averaging period. Each emission unit limitation specifies the averaging period used by the CEM. For example, the CEM on #14 Boiler derives a value averaged over 1 hour.

Air Flow Rate must be representative of normal operation. Air flow derived from correlation between firing rate and Method 2 determined air flow resulting from source testing.

Unit Conversion Factor is pollutant specific and involves molar mass and molar volume.

Time Adjustment is case specific and is dependent on the flow rate time unit. For example, a daily pounds per hour CO rate is calculated using CEM data from the 24 hour day and measured flow rates. That average is placed into the previous 364 days of data to derive the current 365 day average as required by the permit.

Permit Condition A.3

$$\text{SO2 (mass per time)} = \text{Concentration} * \text{Air Flow Rate} * \text{Unit Conversion Factor} * \text{Time Adjustment}$$

Concentration is case specific in terms of averaging period. Each emission unit limitation specifies the averaging period used by the CEM. For example, the CEM on #14 Boiler derives a value averaged over 1 hour.

Air Flow Rate must be representative of normal operation. Air flow derived from correlation between firing rate and Method 2 determined air flow resulting from source testing.

Unit Conversion Factor is pollutant specific and involves molar mass and molar volume. For example, the unit conversion factor for SO2 is 64 lb/mole * 1 mole/385 cubic feet.

Time Adjustment is case specific and is dependent on the flow rate time unit. For example, a daily pounds per hour SO2 rate is calculated using CEM data from the 24 hour day and measured flow rates. That average is placed into the current months data to derive the current monthly average, this 1

month average is then placed into the previous 11 months to derive the rolling 12 month average as required by the permit.

Permit Condition A.4

$$\text{VOC (mass per time)} = \text{Concentration} * \text{Air Flow Rate} * \text{Unit Conversion Factor} * \text{Time Adjustment}$$

Concentration is case specific in terms of averaging period. Each emission unit limitation specifies the averaging period.

Air Flow Rate must be representative of normal operation and is derived from the RM 5 test.

Unit Conversion Factor is pollutant specific and involves molar mass and molar volume.

Time Adjustment is case specific and is dependent on the flow rate time unit.

Permit Conditions A.5,

$$\text{PM (mass per time)} = \text{Concentration} * \text{Air Flow Rate} * \text{Unit Conversion Factor} * \text{Time Adjustment}$$

Concentration is Reference Method (RM) dependent. For example, RM 5 gives PM in terms of gr/dscf.

Air Flow Rate must be representative of normal operations and is derived from the RM 5 test.

Unit Conversion Factor is case specific. For example 7,000 grains = 1lb.

Time Adjustment is case specific and is dependent on the flow rate time unit.